

Application No. 10/037372
Amendment dated December 14, 2005
Reply to Office Action of October 18, 2005

Docket No.: 013217.0179PTUS
(401045-A-01-US)

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A redundant network management system for assigning a master port network controller to control the operation of at least one of a plurality of network ports in response to received call requests, the system comprising:

two call processing devices, wherein one of the two call processing devices is active and the other one of the two call processing devices is inactive ~~and the active one of the two call processing devices receives a call request and generates a call routing instruction;~~

an interconnecting means for connecting the two call processing devices, wherein the active one of the two call processing devices receives the call requests, and generates ~~the a~~ call routing instruction, and sends a copy of the received call requests to the inactive call processing device;

at least two port network controllers ~~interfacing with~~ connected to the two call processing devices for receiving call routing instructions from the active one of said two call processing devices to control the operation of at least one of said plurality of network ports in response to said received call requests; and

[[a]] port network controller selection means, connected to said at least two port network controllers and operating independent of said interconnecting means functioning to interconnect said two call processing devices, for assigning one of the at least two port network controllers as the master port network controller, wherein the one of the at least two port network controllers that is assigned as the master port network controller processes the call routing ~~instruction~~ instructions received from the active one of said two call processing devices.

2. (Original) The redundant network management system of claim 1 wherein the means for assigning further comprises:

a token bus interconnecting the at least two port network controllers, wherein one of the at least two port network controllers request a token and the one of the at least two port network controllers that receives the token is the master port network controller.

3. (Currently amended) A redundant network management system for assigning a master port network controller to control the operation of at least one of a plurality of network ports in response to received call requests, the system comprising:

an inactive call processing device;

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an active call processing device to ~~processes~~ process a plurality of call requests and generate a plurality of call routing instructions;

a means for interconnecting the active call processing device and the inactive call processing device such that, when the active call processing device receives the plurality of call requests, the active call processing device sends a copy of the plurality of call requests to the inactive call processing device ~~and the active call processing device~~; and

two or more port network controllers connected to the active call processing device and the inactive call processing device to receive the plurality of call routing instructions from the active one of said two call processing devices to control the operation of at least one of said plurality of network ports in response to said received call requests; and

a token bus interconnecting the two or more port network controllers, wherein at least one of the two or more port network controllers ~~request~~ requests a token, and the one of the two or more port network controllers that receives the token is assigned as the master port network controller to process the plurality of call routing instructions received from the active call processing device, independent of the functioning of said means for interconnecting.

4. (Original) The system of claim 3 further comprising:

a communication channel interconnecting the two or more port network controllers to the active call processing device and the inactive call processing device, wherein the active call processing device sends the plurality of call routing instructions to the master port network controller via the communication channel.

5. (Currently amended) The system of claim 3, wherein a means for interconnecting comprises:

a communication link interconnecting the inactive call processing device and the active call processing device, wherein, when the communication link fails, the inactive call processing device transitions to an active state.

6. (Currently amended) A method of assigning a master port network controller in a telephony switching system comprising an active call processing ~~devices~~ device connected to an inactive call processing device via a communication link, and the active call processing device processes a plurality of call requests and transmits a plurality of call routing instructions over a

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channel to a plurality of port network controllers to control the operation of at least one of a plurality of network ports in response to received call requests and sends a copy of the received call requests to the inactive call processing device, wherein the plurality of port network controllers are interconnected via a token bus connection, the method comprising:

sending at least one instruction from at least one of the duplicate call processing devices to at least one of the plurality of port network controllers instructing the at least one of the plurality of port network controllers to operate as the master port network controller independent of said communication link functioning to interconnect said two call processing devices;

sending at least one request for a token from the at least one of the plurality of port network controllers that received the at least one instruction; and

giving the token to one of the at least one of the plurality of port network controllers that sent the at least one request for a token, wherein the one of the plurality of port network controllers that receives the token operates as the master port network controller.

7. (Currently amended) The method of claim 6 wherein sending at least one instruction further comprises:

sending a first instruction from the active call processing device to a first one of the plurality of port network controllers instructing the first one of the plurality of port network controllers to operate as the master port network controller; and

sending a second instruction from the inactive call processing device to a second one of the plurality of port network controllers instructing the second one of the plurality of port network controllers to operate as the master port network controller.

8. (Original) The method of claim 6 wherein sending at least one request further comprises:

sending a first request for the token from a first one of the plurality of port network controllers; and

sending a second request for the token from a second one of the plurality of port network controllers.

9. (Currently amended) A method of assigning a master port network controller when a telephony switching system is initialized, the telephony switching system comprising a first

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call server and a second call server interconnected by a communication link and interfacing with two or more port network controllers to control the operation of at least one of a plurality of network ports in response to received call requests, the two or more port network controllers connected on a token bus, the method comprising:

the first call server~~[[,]]~~ receiving call requests, generating a call routing instruction, sending a copy of the received call requests to the inactive call server, instructing one of the two or more port network controllers to operate as the master port network controller;

the one of the two or more port network controllers~~[[,]]~~ transitioning to a master port network controller independent of said communication link functioning to interconnect said two call processing devices, the transition comprising:

requesting a token from the token bus;

receiving the token; and

informing the first call server that the one of the two or more port network controllers received the token.